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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/656,992 09/05/2003 Stephan Schneider 81044994 9715 22844 EXAMINER 11/02/2004 FORD GLOBAL TECHNOLOGIES, LLC. PASCHALL, MARK H SUITE 600 - PARKLANE TOWERS EAST ART UNIT PAPER NUMBER ONE PARKLANE BLVD. DEARBORN, MI 48126 3742

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/656,992	SCHNEIDER ET AL.
	Examiner	Art Unit
	Mark H Paschall	3742
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) dare will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on	<u>.</u> ,	
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>1-9</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-9</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or	r election requirement.	
Application Papers		
9) The specification is objected to by the Examine	r.	
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) ☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	e Action or form PTO-152.
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicat ity documents have been receiv ı (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 01-28-04.	4)	· · (PTO-413)
1 aper 110(5)/111an Date <u>01-20-01</u> .		

Application/Control Number: 10/656,992

Art Unit: 3742

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim1-5,7,8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamada in view of Sway-Tin et al. Tamada teaches the claimed subject matter except for showing use of current maximum power available in the control scheme. The patent to Sway-Tin et al are applied for teaching use of power sensing in a vehicle to aid in the control scheme. This leads to more effective use of the vehicles power and enables better performance. In view of this teaching it would have been obvious to modify Tamada to use power sensing in the control scheme, to enhance the performance of the control scheme. As per claim 2 Tamada teaches use of an alternator as the power

Application/Control Number: 10/656,992

Art Unit: 3742

source, and as per claim 4 Sway-Tin et al teach the claimed display means. As per claim 8-note use of current limiter in Sway-Tin et al.

Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamada in view of Swat-Tin et al as applied to claims 1-5,7,8 above, and further in view of Ohkuma et al. Tamada et al as modified teach the claimed subject matter except for showing the use of PI control to effect the temperature control scheme. Ohkuma et al is applied for teaching that accurate temperature control in a vehicle can be attained using Pi or PID control and in view of this teaching it would have been obvious to modify Tamada et al further to include an integral term in combination with the proportional control in the control scheme, with the benefit of more accurate control and less hysteresis effected.

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Curti and Dojack are cited for disclosing temperature controllers of interest to the instant invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark H Paschall whose telephone number is 703 308-1642. The examiner can normally be reached on 7am - 3pm.

Art Unit: 3742

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (703) 305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

m Heseld Mark H Paschall Primary Examiner Art Unit 3742

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